(FILE 'HOME' ENTERED AT 13:02:27 ON 08 AUG 2003)

FILE 'REGISTRY' ENTERED AT 13:03:27 ON 08 AUG 2003 0 S HEXENE/C L1L24 S HEXENE/CN FILE 'CAPLUS, USPATFULL' ENTERED AT 13:04:46 ON 08 AUG 2003 . 10992 S L2 L3 L42799 S L3 AND MIXTURE L5 948 S L4 AND BY WEIGHT 361 S L5 AND LINEAR L7 229 S L6 AND ALCOHOL 33 S L7 AND SURFACTANT L8 L9 17 S L8 AND DIMER? L105 S L9 AND OLEFIN MIXTURE L1112 S L9 NOT L10 L12 12 DUP REM L11 (0 DUPLICATES REMOVED) L13 0 S L12 AND HEXENE ISOMERS L141088 S LINEAR (P) HEXENE (P) BY WEIGHT L15 97 S L14 AND DIMER? L16 40 S L15 AND SURFACTANT L17 38 S L16 AND ALCOHOL L18 36 S L17 NOT L9 L19 27 S L18 AND OLEFIN L20 27 S L19 AND MIXTURE L21 27 DUP REM L20 (0 DUPLICATES REMOVED)

23 S L21 AND ETHER

0 S L22 AND OLEFIN MIXTURE

L22

L23

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ΑN
     2000:645959 CAPLUS
DN
     133:239738
     Surfactant alcohols, their production and their use
TI
     and olefin mixtures therefor
IN
     Maas, Heiko; Roper, Michael; Walter, Marc; Schulz, Ralf; Tropsch, Jurgen;
     Jager, Hans-Ulrich
PA
     Basf Aktiengesellschaft, Germany
     PCT Int. Appl., 35 pp.
so
     CODEN: PIXXD2
DT
     Patent
     German
LA
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO. DATE
                           -----
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                                           -----
                           20000914
                                          WO 2000-EP1935
PΙ
     WO 2000053547
                     A1
                                                           20000306
             AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
             CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
             IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
             MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
             SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     DE 19910370'
                       A1
                            20000914
                                         DE 1999-19910370 19990309
     EP 1159237
                            20011205
                                          EP 2000-909324
                       A1
                                                            20000306
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     JP 2002539095
                       T2
                            20021119
                                           JP 2000-603990
                                                            20000306
     US 6566566
                       B1
                            20030520
                                           US 2001-936183
                                                            20010910
PRAI DE 1999-19910370 A
                            19990309
     WO 2000-EP1935
                       W
                            20000306
OS
     MARPAT 133:239738
     The invention relates to a method of prepg. surface-active alcs.
AB
     and surface-active alc. ethers which are well suited for use as
     surface-active agents or for the prepn. of surface-active agents. To this
     end, olefin mixts. contg. a predominant share of
     branched dodecenes (prepd. from olefin mixts. contg.
     less than 30 % by wt. linear hexene isomers using a
     catalyst contg. nickel) are derivatized to form surface-active
     alcs. which are then possibly alkoxylated. The invention also
     relates to the use of said surface-active alcs. and
     surface-active alc. ethers for the prepn. of surface-active
     agents by glycosidation or polyglycosidation, sulfation, or phosphation.
     In an example, a mixt. of of methylpentenes 71, hexenes 22, and
     dimethylbutenes 7% was dimerized over a catalyst contg. 50% NiO
     to give a dodecene mixt. which was then hydroformylated and
     reduced to give a mixt. of C13-primary alcs. The
     alc. mixt. could then be ethoxylated, phosphated, or
     sulfated and the ethoxylate could also be sulfated or phosphated to give
     surfactants.
RE.CNT 3
              THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 2 OF 5 USPATFULL on STN
L10
AN
       2003:137180 · USPATFULL
TI
       Process for the preparation of surfactant alcohols
       and surfactant alcohol ethers, the prepared products
       and their use
       Maas, Heiko, Schifferstadt, GERMANY, FEDERAL REPUBLIC OF
IN
       Roper, Michael, Wachenheim, GERMANY, FEDERAL REPUBLIC OF
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Walter, Marc, Frankenthal, GERMANY, FEDERAL REPUBLIC OF

ANSWER 1 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN

L10

Schulz, Ralf, Speyer, GERMANY, FEDERAL REPUBLIC OF Tropsch, Jurgen, Romerberg, GERMANY, FEDERAL REPUBLIC OF Jager, Hans-Ulrich, Neustadt, GERMANY, FEDERAL REPUBLIC OF PA BASF Aktiengesellschaft, Ludwigshafen, GERMANY, FEDERAL REPUBLIC OF (non-U.S. corporation) US 6566566 20030520 PIB1 WO 2000053547 20000914 ΑI US 2001-936183 20010910 (9) WO 2000-EP1935 20000306 PRAI DE 1999-19910370 19990309 DTUtility FS GRANTED EXNAM Primary Examiner: Davis, Brian Oblon, Spivak, McClelland, Maier & Neustadt, P.C. Number of Claims: 11 CLMN ECL Exemplary Claim: 1 DRWN 0 Drawing Figure(s); 0 Drawing Page(s) LN.CNT 815 CAS INDEXING IS AVAILABLE FOR THIS PATENT. The invention describes a process for the preparation of surfactant alcohols and surfactant alcohol ethers which are, inter alia, highly suitable as surfactants or for the preparation of surfactants. The process, starting from olefin mixtures which comprise less than 30% by weight of linear hexene isomers and utilizing a catalyst which contains nickel, prepares olefin mixtures having a predominant fraction of branched dodecenes, which are subsequently derivatized to give surfactant alcohols and then optionally alkoxylated. The invention further relates to the use of the surfactant alcohols and surfactant alcohol ethers for the preparation of surfactants by glycosidation or polyglycosidation, sulfation or phosphation. CAS INDEXING IS AVAILABLE FOR THIS PATENT. L10 ANSWER 3 OF 5 USPATFULL on STN AN 93:22909 USPATFULL Detergent grade to C.sub.10 to C.sub.28 olefins, (C.sub.10 to C.sub.28 TI alkyl) benzenes and (C.sub.10 to C.sub.28 alkyl) benzene sulfonates and process for preparing same using a phosphite containing catalyst IN Threlkel, Richard S., Albany, CA, United States Kurkov, Victor P., San Rafael, CA, United States PA Chevron Research & Technology Company, San Francisco, CA, United States (U.S. corporation) PΙ US 5196625 19930323 AΙ US 1992-880473 19920506 (7) Continuation of Ser. No. US 1990-515956, filed on 27 Apr 1990, now RLIabandoned DT Utility FS Granted EXNAM Primary Examiner: Garvin, Patrick P.; Assistant Examiner: Peebles, Brent CLMN Number of Claims: 10 ECL Exemplary Claim: 1 DRWN No Drawings LN.CNT 816 CAS INDEXING IS AVAILABLE FOR THIS PATENT. A dimerization process for producing linear and/or mono-branched C.sub.10 to C.sub.28 olefins using dimerization

catalysts and new C.sub.10 to C.sub.28 olefins

mixtures are disclosed. The C.sub.10 to C.sub.28 olefin product

is especially useful for the production of biodegradable alkylbenzene

sulfonates detergents and intermediates therefor.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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ANSWER 4 OF 5 USPATFULL on STN
L10
ΑN
       92:38577 USPATFULL
       Ionic phosphites used in homogeneous transition metal catalyzed
TI
       processes
IN
       Abatjoglou, Anthony G., Charleston, WV, United States
       Bryant, David R., South Charleston, WV, United States
PΑ
       Union Carbide Chemicals & Plastics Technology Corporation, Danbury, CT,
       United States (U.S. corporation)
PΙ
       US 5113022
                                19920512
ΑI
       US 1991-742012
                                19910808 (7)
       Continuation of Ser. No. US 1988-228507, filed on 5 Aug 1988, now
RLI
       patented, Pat. No. US 5059710
DT
       Utility
FS
       Granted
       Primary Examiner: Daus, Donald G.
EXNAM
LREP
       Finnegan, Reynold J.
       Number of Claims: 14
CLMN
       Exemplary Claim: 2
ECL
       No Drawings
DRWN
LN.CNT 1689
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       This invention relates to novel ionic phosphites and the use thereof as
       ligands in homogenous transition metal catalyzed processes, especially
       hydroformylation.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L10
     ANSWER 5 OF 5 USPATFULL on STN
AN
       91:86850 USPATFULL
ΤI
       Ionic phosphites and their use in homogeneous transition metal catalyzed
       processes
IN
       Abatjoglou, Anthony G., Charleston, WV, United States
       Bryant, David R., South Charleston, WV, United States
       Union Carbide Chemicals and Plastics Technology Corporation, Danbury,
PA
       CT, United States (U.S. corporation)
       US 5059710
PΙ
                               19911022
       US 1988-228507
                               19880805 (7)
AΙ
DT
       Utility
FS
       Granted
ÉXNAM
       Primary Examiner: Daus, Donald G.
LREP
       Finnegan, Reynold J.
       Number of Claims: 25
CLMN
ECL
       Exemplary Claim: 1
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LN.CNT 1683

No Drawings

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

This invention relates to novel ionic phosphites and the use thereof as AB ligands in homogenous transition metal catalyzed processes, especially hydroformylation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DRWN

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L12 ANSWER 5 OF 12 USPATFULL on STN
ΑN
       1998:31183 USPATFULL
TI
       Coproduction of vinylidene alcohols and vinylidene
       hydrocarbons
IN
       Lin, Kaung-Far, Baton Rouge, LA, United States
PA
       Albemarle Corporation, Richmond, VA, United States (U.S. corporation)
PΙ
       US 5731480
                               19980324
       US 1995-552638
                               19951103 (8)
ΑI
       Utility
DT
FS
       Granted
       Primary Examiner: Ivy, C. Warren; Assistant Examiner: Dahlen, Garth M.
EXNAM
LREP
       Pippenger, Philip M.
CLMN
       Number of Claims: 30
ECL
       Exemplary Claim: 1
DRWN
       No Drawings
LN.CNT 605
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB
       A process is described for coproducing vinylidene alcohol and
       vinylidene olefin. The process involves dimerizing one or more
       vinylolefins with an alkyl aluminum catalyst to form a first product
       mixture comprising at least vinylidene olefin and alkyl aluminum
       compound. The vinylidene olefin is then reacted with the alkyl aluminum
       compound under displacement conditions to form 1-olefin while
       concurrently removing the 1-olefin from the displacement reaction
       mixture to form a second product mixture comprising at
       least beta-branched alkyl aluminum compound. The second product
       mixture is treated with air or oxygen under mild oxidation
       conditions to form a third product mixture comprising at least
       beta-branched aluminum alkoxide. The beta-branched aluminum alkoxide is
       then hydrolyzed to form vinylidene alcohol. The process makes
       effective use of the alkyl aluminum catalyst both as a catalyst and as a
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reactant, and requires only a relatively small amount of reaction

equipment.

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L12
     ANSWER 6 OF 12 USPATFULL on STN
ΑN
       90:83598 USPATFULL
ΤI
       Process for preparing linear alpha-olefins using zirconium
       adducts as catalysts
       Young, David A., Baton Rouge, LA, United States
TN
       Jones, Larry O., Baton Rouge, LA, United States
       Campione, Troy J., Baton Rouge, LA, United States
PA
       Exxon Chemical Patents Inc., Linden, NJ, United States (U.S.
       corporation)
       US 4966874
                                19901030
PΙ
       US 1989-325878
                                19890320 (7)
ΑI
       Division of Ser. No. US 1988-195665, filed on 18 May 1988, now patented,
RLI
       Pat. No. US 4855525, issued on 8 Aug 1989 which is a
       continuation-in-part of Ser. No. US 1987-63662, filed on 19 Jun 1987,
       now abandoned
DT
       Utility
FS
       Granted
       Primary Examiner: Garvin, Patrick P.
EXNAM
LREP
       Mahon, J. J.
CLMN
       Number of Claims: 4
ECL
       Exemplary Claim: 1
DRWN
       No Drawings
LN.CNT 594
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       Linear alpha-olefins are prepared by the oligomerization of
       ethylene using a two component catalyst system comprising (a) a soluble
       adduct of zirconium tetrahalide, the halogen being Br or Cl, with an
       organic compound selected from the group of esters, ketones, ethers,
       amines, nitriles, anhydrides, acid chlorides, amides or aldehydes, the
       organic compound having up to about 30 carbon atoms and (b) an alkyl
       metal selected from the group R.sub.2 AlX. RAlX.sub.2, R.sub.3 Al.sub.2
       X.sub.3, R.sub.3 Al and R.sub.2 Zn where R is C.sub.1 -C.sub.20 alkyl
       and X is Cl or Br. ZrCl.sub.4 adducts with organic acetates are the
       preferred embodiments.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
=> d l12 bib abs 7-12
T<sub>1</sub>12
     ANSWER 7 OF 12 USPATFULL on STN
AN
       89:65318 USPATFULL
TI
       Process for preparing linear alpha-olefins using zirconium
       adducts as catalysts
TN
       Young, David A., Baton Rouge, LA, United States
       Jones, Larry O., Baton Rouge, LA, United States
       Campione, Troy J., Baton Rouge, LA, United States
       Exxon Chemical Patents-Inc., Linden, NJ, United States (U.S.
PA
       corporation)
PΤ
                                19890808
       US 4855525
ΑI
       US 1988-195665
                                19880518 (7)
       Continuation-in-part of Ser. No. US 1987-63662, filed on 19 Jun 1987,
RLI
       now abandoned
DT
       Utility
FS
       Granted
      Primary Examiner: Pal, Asok
EXNAM
LREP
       Mahon, J. J.
CLMN
       Number of Claims: 28
ECL
       Exemplary Claim: 1
       No Drawings
DRWN
LN.CNT 694
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       Linear alpha-olefins are prepared by the oligomerization of
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ethylene using a two component catalyst system comprising (a) a soluble adduct of zirconium tetrahalide, the halogen being Br or Cl, with an organic compound selected from the group of esters, ketones, ethers, amines, nitriles, anhydrides, acid chlorides, amides or aldehydes, the organic compound having up to about 30 carbon atoms and (b) an alkyl metal selected from the group R.sub.2 AlX. RalX.sub.2, R.sub.3 Al.sub.2 X.sub.3, R.sub.3 Al and R.sub.2 Zn where R is C.sub.1 -C.sub.20 alkyl and X is Cl or Br. ZrCl.sub.4 adducts with organic acetates are the preferred embodiments.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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86:38384 USPATFULL
AN
TΙ
       Detergent range aldehyde and alcohol mixtures and
       derivatives, and process therefor
TN
       Forster, Denis, St. Louis, MO, United States
       Schaefer, George F., Olivette, MO, United States
       Barker, George E., St. Louis, MO, United States
       Monsanto Company, St. Louis, MO, United States (U.S. corporation)
PA
PΙ
       US 4598162
                               19860701
       US 1983-549524
                               19831104 (6)
AΙ
       Continuation-in-part of Ser. No. US 1983-499967, filed on 1 Jun 1983,
RLI
       now abandoned And a continuation-in-part of Ser. No. US 1981-272587,
       filed on 11 Jun 1981, now patented, Pat. No. US 4426542 which is a
       continuation-in-part of Ser. No. US 1981-256439, filed on 22 Apr 1981,
       now abandoned which is a continuation of Ser. No. US 1979-104517, filed
       on 17 Dec 1979, now abandoned
DT
       Utility
FS
       Granted
       Primary Examiner: Lone, Werren B.
EXNAM
       Kennedy, Joseph D., Williams, Jr., James W.
LREP
CLMN
       Number of Claims: 13
ECL
       Exemplary Claim: 1
       2 Drawing Figure(s); 2 Drawing Page(s)
DRWN
LN.CNT 2365
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB
       Novel, liquid mixtures of isomeric aldehydes and
       alcohols are described in the C.sub.11 -C.sub.16 carbon range,
       the compounds being characterized by a main carbon branched at the
       position and moderate additional branching in most isomers; the aldehyde
       mixtures are prepared by an economic route from olefins
       involving oxo and aldol reaction with the reaction conducted in such a
       way as to give a high percentage of aldolable product, and preferably
       with a base catalyzed aldol reaction conducted under conditions to make
       high conversions attainable. The aldehyde mixtures can be
       hydrogenated to alcohols and converted to novel ethoxylates or
       sulfate compositions suitable for use as biodegradable detergents; or
       hydrogenated and oxidized to novel carboxylic acid compositions also
       suitable for detergent use.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L22
     ANSWER 22 OF 23 USPATFULL on STN
       85:30136 USPATFULL
AN
TI
       Preparation of pentyl nonanols
TN
       Forster, Denis, St. Louis, MO, United States
       Schaefer, George F., Olivette, MO, United States
PA
       Monsanto Company, St. Louis, MO, United States (U.S. corporation)
PΙ
       US 4518809
                               19850521
ÀΙ
       US 1983-499967
                               19830601 (6)
       Continuation-in-part of Ser. No. US 1981-272587, filed on 11 Jun 1981,
RLI
       now patented, Pat. No. US 4426542 which is a continuation-in-part of
       Ser. No. US 1981-256439, filed on 22 Apr 1981, now abandoned which is a
       continuation of Ser. No. US 1979-104517, filed on 17 Dec 1979, now
       abandoned
DT
       Utility
FS
       Granted
EXNAM Primary Examiner: Lone, Werren B.
LREP
       Kennedy, Joseph D., Williams, Jr., James W.
CLMN
       Number of Claims: 17
ECL
       Exemplary Claim: 1
       2 Drawing Figure(s); 2 Drawing Page(s)
LN.CNT 1419
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       A novel, liquid mixture of C.sub.14 isomeric alcohols
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ANSWER 21 OF 23 USPATFULL on STN

22

is described which is suitable for use in forming effective and biodegradable detergents, the **alcohols** being characterized by a 5-carbon branch at the 2-position and moderate additional branching in most isomers; the **alcohols** are prepared by a novel economic route from propylene **dimer**, involving oxo, aldol and hydrogenation reactions with the oxo reaction conducted in such a way as to give a high percentage of aldolable product and preferably with a base-catalyzed aldol reaction conducted under particular conditions to make high conversions attainable.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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ANSWER 23 OF 23 USPATFULL on STN
L22
AN
       84:3343 USPATFULL
       Synthesis of plasticizer and detergent alcohols
ΤI
       Barker, George E., St. Louis, MO, United States
TN
       Forster, Denis, St. Louis, MO, United States
       Monsanto Company, St. Louis, MO, United States (U.S. corporation)
PΑ
PΤ
       US 4426542
                               19840117
ΑI
       US 1981-272587
                               19810611 (6)
RLI
       Continuation-in-part of Ser. No. US 1981-256439, filed on 22 Apr 1981,
       now Defensive Publication No. which is a continuation of Ser. No. US
       1979-104517, filed on 17 Dec 1979, now Defensive Publication No.
DT
       Utility
       Granted
FS
       Primary Examiner: Lone, Werren B.
EXNAM
       Kennedy, Joseph D., Williams, Jr., James W.
LREP
       Number of Claims: 23
CLMN
ECL
       Exemplary Claim: 1
DRWN
       No Drawings
LN.CNT 1175
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB
       A preparation of a plasticizer alcohol, consisting of
       predominantly 2-propylheptanol, from linear butenes is described in
       which oxo product of the butenes is aldoled to condense n-pentaldehyde
       therein with very little cross-aldolization followed by hydrogenation to
       obtain the 2-propylheptanol with very small 2-propyl-4-methyl hexanol
       content. The alcohol product as phthalate ester has excellent
       plasticizer properties. Also processes are described for converting
       other olefins to alcohols by oxo, aldol and
       hydrogenation reactions, with particular attention to converting hexenes
       obtained by propylene dimerization to C.sub.14
       alcohols suitable for preparation of detergents.
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CAS INDEXING IS AVAILABLE FOR THIS PATENT.